POLITICAL CONNECTIONS, FINANCE AND GROWTH:

THE ROLE OF PARTY LEADERSHIP POSITIONS

ZHAO XUEJUAN

(B. Econ., Peking University)

A THESIS SUBMITTED

FOR THE DEGREE OF MASTER OF SCIENCE (BUSINESS)

DEPARTMENT OF STRATEGY AND POLICY

NATIONAL UNIVERSITY OF SINGAPORE

2009

Acknowledgements

This would not have been made possible without the support of the following people, and I would like to take this opportunity to acknowledge their support rendered:

First, I would like to thank my advisor, Prof Bernard Yeung, for his valuable help throughout this project. I would also like to thank Prof Meijun Qian from the Department of Finance for her inputs along the way. They have given me feedback and advice at every stage of the process, and always been there whenever I needed help. Every discussion with them resulted in an important improvement of my work. I am also grateful to Lixin Colin Xu from World Bank for kindly providing the data used in this research and his encouragement. Without their assistance, this thesis would not have been made possible.

I would also like to thank Prof Qiang Fu for having taken the time to meet with me and discuss my work. Among my many fellow students, Jing Shang, Weiqi Zhang, Tanmay Satpathy, and Hongjin Zhu, all deserve my thanks for always being there for me when things got tough.

Finally, I would like to thank my parents whose love and support are unconditional in everything that I have and will achieve.

Table of Contents

Acknowledgements i
Table of Contents ii
Abstract iii
List of Tables iv
List of Figures v
Chapter 1: Introduction 1
Chapter 2: Literature Review 6
2.1 Political connections 6
2.2 Politics and lending in China 7
Chapter 3: Data and Variables 12
3.1 Data 12
3.2 Dependent Variables 14
3.3 Measuring Political Connections 14
3.4 Control Variables 16
3.5 Methodology 18
3.6 Summary Statistics 19
Chapter 4: Main findings 21
4.1 Access to Bank Loans and Political Connections 21
4.2 Loan Terms: Collateral and Maturity 24
4.3 Subsample Analysis: Firms with External Financing Needs 26
4.4 Subsample Analysis: Firms in Different Regions 27
4.5 Robustness Check: Heckman's Lambda Approach 28
4.6 Growth Analysis 30
Chapter 5: Conclusion 34
Reference 36

Abstract

A number of recent papers have documented that firms receive preferential treatments because of their political connections. In this paper, I study whether politically connected firms have received preferential treatment in bank financing and the impact of that on economic growth. Using a firm-level survey data of Chinese firms, I find that private firms with Party-leader General Managers are more likely to access bank loans, although there is little evidence that they get better loan terms regarding collateral requirements. Party membership alone does not induce favors from banks. On the other hand, General Managers' involvement in the Party does not affect access to bank loans for SOEs. The positive relationship between political connections and bank loans for private firms also shows geographical differences in magnitude although qualitatively similar. The paper also provides suggestive evidence that bank credit extended to non-connected private firms has positive effects on GDP growth.

List of Tables

Table 1. Bank loans and Party leadership positions of general managers 40

Table 2. Summary statistics of main variables 41

Table 3. Pearson correlation coefficients between bank finance and political connections 42

Table 4. Impact of political connections on access to bank loans 43

Table 5. Impact of political connections on the number of banks 45

Table 6. Impact of political connections on the requirement of collateral 46

Table 7. Impact of political connections on the value of collateral required as percentage of loan value 47

Table 8. Impact of political connections on the maturity of long-term loan 48

Table 9. Impact of political connections on access to bank loans in firms with external financing needs 49

Table 10. Impact of political connections on access to bank loans in different regions.....50

Table 11. Probit regression-the likelihood that a firm has political connections...51

Table 12. Robustness check-Heckman's lambda approach.....52

Table 13. Impact of non-connected lending to private firms on GDP growth 53

List of Figures

Figure 1. GDP growth rate (2003) and non-connected lending.....54

Figure 2. GDP growth rate (2004) and non-connected lending.....55

Chapter 1: Introduction

The nexus between business and politics has been of keen interest for economists for many years. Faccio (2006) documents the prevalence of politically connected firms all over the world. These firms engage in rent seeking activities where they enhance their firm value by receiving preferential treatment from government like lighter taxation, better access to external financing and raw materials, relaxed regulatory oversight of the company in question, favorable position in competing for government contracts, and many other forms.

Despite the accumulating evidence on the economic rents enjoyed by politically connected firms, direct evidence linking political connection, finance and economic growth is still lacking in transition economies. Contemporary China offers a unique research setting to study interpenetration of bureaucrats and business people for several reasons. First, the transition economy is known for the underdevelopment of market institutions and significant distortions which makes the value of political connections potentially greater than other more developed economies. In China, the government controls critical resources and interferes heavily with economic activities. Second, the financial system in China is characterized by a large banking sector dominated by four big state-owned banks, which are known for their weak governance structure and inefficiency in credit

allocation. Third, even though the transition has moved far, state-owned enterprises (SOEs) and private firms coexist and will continue to do so in foreseeable future. Such backgrounds create an opportunity to study how political connections function with different types of enterprises. Studies on this topic have important policy implications.

In this paper, I address two fundamental political economy questions: given the government ownership of banks, do banks favor politically connected firms? If so, is this lending behavior detrimental to economic growth? In the empirical analysis, I use a unique database based on the Investment Climate Survey, a major firm level survey conducted in early 2003 and led by the World Bank. The survey contains firm level information on bank financing across 18 cities. One of the strengths of the survey is its coverage of small and medium enterprises.

This paper provides direct evidence of politically motivated lending at government-owned banks in a transition economy in the form of credit access for private firms whose general manager is a Party leader relative to those who are not. Running the same set of tests in two comparable samples of SOEs and private firms, I find that the higher chance for politically connected private firms to secure bank loans is robust to controlling for manager characteristics and firm attributes. This relation exists only for private firms and only when the General Manager is some sort of a Party leader, rather than just a Party member. In the comparable

SOE sample, however, neither leadership nor membership in the Party significantly influences bank behavior. Previous studies have proven that there exists a general bias towards SOEs in credit allocation (Cull and Xu, 2003). My findings extends their studies in that given the bias, the mechanism is not through Party involvement. My interpretation is that SOEs are connected with the government by strong ownership links that outplay the general involvement of managers in the Party (most general managers in SOEs are bureaucrats who assume some leadership position in the Party). Therefore, the connection through party participation becomes redundant.

In further examination, I investigate the loan terms offered by the banks given the firm's access to loans. The results are somewhat mixed. There is no clear evidence that politically connected firms enjoy better loan terms in regard to whether or not collateral is required and what percentage the collateral is to loan value. However, I cannot state with confidence that politically connected firms do not enjoy better loan terms without an examination of the interest rates charged which unfortunately I do not have usable information on.

Considering the measure of political connection used in the paper is more sensitive to private firms, I subject them to subsample analysis by breaking down the sample of private firms to five regions (Coastal, Southwest, Central, Northwest, and Northeast) to investigate geographical heterogeneity within China.

The results show that the highest level of bank financing is in the Coastal (29%) and Southwest regions (22%) which Dollar et al. (2004) believe to have a more supportive investment climate that facilitates access to formal sources of external financing. Leadership position in the Party is positively associated with bank financing in Coastal, Central and Northeast region, positive but not significant in the Southwest region (Northwest has too few observations for regression analysis). This has confirmed my general finding while giving us a more nuanced picture of bank lending in different regions. Political connections measured by the level of participation in the Party serve as an effective mechanism to mitigate the less advantaged position of private firms in credit market.

Finally, I link economic growth and connected lending on the provincial level. As I only have 15 provinces in the sample, regression analysis is somewhat compromised due to the sample size limitation. However, suggestive evidence shows that external financing (bank loans in this case) to non-connected private firms is positively related to GDP growth. This is quite an intriguing finding put in the context of political connections literature. As many prior work link political connections with economic benefits for connected firms, the direct evidence of adverse effects for the economy is less available with the exception like Khwaja & Mian (2005) who estimate the economy-wide cost of the rents from connected lending to be 0.3 to 1.9 percent of GDP every year in Pakistan.

The paper is organized as follows. The next chapter reviews relevant literature. Chapter 3 introduces data and methodology. Chapter 4 presents empirical evidence on the relationship between political connection, access to bank finance and economic growth. Chapter 5 concludes.

Chapter 2: Literature Review

2.1 Political connections

There is a growing economic literature studying the importance and the value of political connections. Political connections can help firms secure favorable regulatory conditions (Agrawal and Knoeber, 2001), pay lighter taxation (De Soto, 1989), achieve higher firm values (Shleifer and Vishny, 1994; Fisman, 2001), and improve firm performance (Johnson and Mittion, 2003). One important channel for the government or politicians to bestow favors to politically connected firms is through better yet undeserved treatments in obtaining bank credit. Khwaja & Mian (2005) examine the universe of corporate lending in Pakistan and find that connected firms borrow 45 percent more and have 50 percent higher default rates. Such preferential treatment occurs exclusively in government banks. Charumilind, Kali, & Wiwattanakantang (2006) show that before the Asian financial crisis, connected firms need less collateral and obtain more long-term loans than those without connections in Thailand. Claessens, Feijen, & Laeven (2008) find that Brazilian firms which have contributed to federal deputies experienced higher stock returns around the 1998 and 2002 elections. Contributing firms also substantially increased their bank financing relative to a control group after each election. My study extends this literature in examining the largest emerging economy with its unique regime.

2.2 Politics and lending in China

China's growth remains a mystery for the finance and growth literature given the underdevelopment of financial markets and institutions. The Chinese financial system is characterized by a large banking sector, dominated by four big state-owned banks. In 2000, loans granted by these four banks account for 77% of the total bank credit extended (People's Bank of China, 2001). As stated in Farrell et al. (2006), equity market capitalization, excluding non-tradable state-owned shares, is equivalent to just 17 percent of GDP, compared to 60 percent or more in other emerging markets and corporate bond issues by non-financial companies amount to just 1 percent of GDP, compared to an average of 50 percent in other emerging markets. Allen et al. (2005) suggest informal financing might be an important supplement. However, the private money houses and underground lending organizations charge very high interest rates and such conduct is technically illegal (Farrell et al. 2006). As a result, companies rely heavily and compete fiercely for bank loans.

The pervasive state ownership of the banking sector in China has given rise to several serious problems including a huge ratio of non-performing loans to total loans, poor profitability, poor institutional framework of the banking system, weak corporate governance and reduced competitive pressure on the banks to operate as profit making enterprises (Ayyagari et al., 2007). SOEs continue to receive a disproportionately large share of the credit extended by the main banks

in China while the thriving private sector is credit constrained (Brandt and Li, 2003). Recent empirical evidence shows that state banks have grown increasingly inefficient in allocating credit as they have been increasingly forced to bail out poorly performing SOEs (Lardy, 1998; Cull and Xu, 2003).

Also, the credit market is inflicted by the information asymmetry between lenders and borrowers (Stiglitz & Weiss, 1981). It was less than 30 years since China's private sector began to emerge with newly established and privatized SOEs. Thus most of China's private enterprises are smaller and younger than their SOE counterparts and are more risky in the eyes of the lenders. In addition, with the potential threat of appropriation, private enterprises in China tend to disguise their actual economic gains, making it difficult for lenders to screen out good applicants from the bad. Third, the lack of quality credit rating services and information disclosure makes it hard to tell high quality firms. Thus, lending to SOEs seems a low-risk option. Given their government backing, it is acceptable if they default.

Prior to the reform from the planned economy to a market economy, private firms were virtually nonexistent in the Chinese economy between 1952 and 1977. In the initial stage (late 1970s and the early 1980s) of private business development, the state remained ambivalent towards private business and imposed rigid restrictions on it. Since Deng Xiaoping's Southern Tour of 1992, private

sector has experienced explosive growth and been acknowledged as an important part of the socialist market economy[1]. It has emerged as the most dynamic sector of the national economy employing nearly 50 percent of the work force and producing 60 percent of the industrial output by 2004 (Li et al., 2008).

Despite the spectacular growth, private sector has been hampered by many institutional obstacles. Nee (1992) identifies weak market structures, poorly specified property rights, and institutional uncertainty as the characteristics of transition economy in China. These institutional impediments considerably increase the operating cost for private firms, and potentially threaten their survival and prosperity (De Soto, 1989). In the initial stage of development, private firms were considered an inferior ownership structure for ideological reasons. Most entrepreneurs were marginal people who were not able to get state jobs. Because of the historical political campaigns against capitalists, the society views them with prejudice and hostility. Until the early 1990s, private entrepreneurs were carefully controlled and denied entrance into the political establishment. Ideology has become less of a concern since early 1990s as the government attempted to raise the image of private business and acknowledge the important role played by the private sector in economic development.

[1]By the end of 1992, the report of the Fourteenth Party Congress stated that various types of ownership should develop together over a long period. The Fifteenth Party Congress in 1997 confirmed that the non-public sector is an important part of the socialist market economy and that individually owned businesses and private enterprises should be encouraged and developed. In the amended Constitution passed by the People's National Congress in March 1999, the phrase that individually owned and private business is a "complement to the public economy" was replaced by a phrase identifying it as an "important part of the socialist market economy."

In spite of the ideological loosening, the environment faced by the private sector is unfavorable. Government officials in transition economies have been described as grabbing hands, preying on private businesses (Shleifer, 1997). In the absence of well-defined private property rights, private firms are subject to interventions like excessive regulations (red tape) and/or very high taxes and "extralegal" fees (Hellman et al., 2003; Guriev, 2004; McMillan and Woodruff, 2002). Their access to capital and other factor markets is restricted given the government's control of critical resources. It is still a long way to go before private business can compete fairly with SOEs.

To compensate for the institutional disadvantage, private firms actively participate in politics to build connections with bureaucrats who can protect and bestow favors onto their businesses. Entrepreneurs use their wealth to gain entry into the political arena while government officials use their power to involve in market activities which gives rise to official profiteering, corruption and rent-seeking. Private firms with political connections can be rewarded by less levies, lighter taxation, oligopoly position and access to bank financing. The weak governance structure inside state-owned banks provides plenty of opportunities for bureaucrats to extend credit to politically connected firms instead of economically efficient ones. Therefore, firms spend significant resources to cultivate such connections with government officials as a compensation for the lack of formal institutional support (Xin and Pearce, 1996) or some government

officials even become entrepreneurs themselves to make direct use of their political capital. Choi and Zhou (2001) show that ex-cadre entrepreneurs, having political connections, achieve significantly higher profits compare with non-ex-cadre entrepreneurs.

Chapter 3: Data and Variables

3.1 Data

The firm-level data set comes from the Investment Climate Survey, a major survey conducted in early 2003 and led by the World Bank (with the cooperation of the Enterprise Survey Organization of China). It covers 2,400 firms from 18 cities, representatively located across five regions of China. Either 100 or 150 firms were randomly sampled for each city from an electronic database of firms subject to the following constraints. First, firms are selected to ensure that both manufacturing and service industry firms are adequately represented. The industry coverage is as follows: for manufacturing, apparel and leather goods, electronic equipment, electronic components, consumer products, and vehicles and vehicle parts; for services, accounting and related services, advertising and marketing, business logistics services, communication services, and information technology services. Second, only firms that satisfy minimum size requirement (measured by number of employees) are sampled[2] .

A total of 18 cities were selected, representing five regions across China: (1) Northeast: Benxi, Changchun, Dalian, and Haerbin; (2) Coastal: Hangzhou, Jiangmen, Shenzhen, and Wenzhou; (3) Central: Changsha, Nanchang, Wuhan,

[2] The minimum number of employees for firms in the sample is 20 in manufacturing industries and 15 in service industries. The size criterion was loosened when there were not enough firms from a particular sector in a city. As a result, roughly 3 percent of firms in our sample have less than 15 employees.

and Zhengzhou; (4) Southwest: Chongqing, Guiyang, Kunming, and Nanning; (5) Northwest: Lanzhou and Xi' an.

The questionnaire consists of two parts. Part one, based on interviews with the manager of a firm, contains questions on general information about the firm and the manager, innovation, market environment, relationships with clients and suppliers, location of manufacturing plant, relations with government, and international trade. Part two is based on interviews with the firm's accountant and personnel manager, who provided quantitative information on production, costs, employee training, schooling, and wage. While most of the qualitative questions pertained only to the year 2002, many quantitative questions also requested information for 2000–2002.

The survey also reports the legal status of the firm as (1) publicly traded or listed company; (2) non publicly-traded shareholding company; (3) private, non-listed company; (4) subsidiary/division of a domestic enterprise; (5) subsidiary/division of a multinational firm; (6) joint venture of a domestic enterprise; (7) joint venture of a multinational firm; (8)state owned company; (9) cooperatives/collective; (10) others.

3.2 Dependent Variables

My main dependent variable is **Bankloan** which takes the value of 1 if the firm states that it has a loan from a bank or financial institution and 0 if the firm states that it has no bank loan and no overdraft facility or line of credit. For all the firms in the sample, Coastal region has the highest percentage of firms with bank loans (30%), followed by Southwest (23%). A supplemental measure of access to bank credit is **Numbank**, which is a category variable of the number of banks that the firm do business with. The bigger the number, the more likely the firm has access to bank channeled funds. Loan terms are analyzed with three variables: **Collateral** takes the value of 1 if the firm is required to put collateral or deposit for the loan they get and 0 if the firm did not put collateral or deposit. **Colvalue** is the reported value of collateral required as a percentage of the loan value if collateral is required. **Maturity** is the average duration (measured in months) of long-term loans reported by firms. In the growth analysis, I use **GDP growth rate** in 2003 and 2004 as a measure of economic growth on provincial level.

3.3 Measuring Political Connections

General Managers can participate in politics in several ways in China: participation in formal political institutions such as the People's Congress, participation in elections at the grassroots level, becoming active members in state-guided associations for private business and joining the Party. The continuance rule of the Chinese Communist Party makes Party membership almost a prerequisite for anyone who wants to enter politics. The attainment of

Party membership is a quite lengthy and extended selection process set by the Party. It generally takes five stages: (1) self-selection, (2) political participation, (3) daily monitoring, (4) closed door evaluation, and (5) probationary examination (Bian et al., 2001). The whole process could take years to complete for a close examination of the applicant's political loyalty as well as superior quality like work ability, interpersonal skills and persistence. Private business owners were originally denied from the Party as the Party claimed to represent the working class of poor peasants and workers. The economic reform loosens ideology; however, the criteria for private business owners to participate were very strict and successful cases were rare. It was not until the Party's Sixteenth Congress in 2002, when formal rights for private business owners to apply for Party membership were granted.

The survey has information on the involvement of the General Managers in the Party. I categorize three levels of involvement: (1) Party leader; (2) Party member; (2) Non Party member (meaning no direct involvement). **Party Leader** is a dummy variable coded as 1 if the manager holds some leadership position in the party including party secretary, deputy party secretary or party committee member or executive member. **Party Member** is a dummy variable coded as 1 if the manager is a member of the party and 0 if he is not a member. Party Leader is a subset of Party Member as all party leaders are by definition party members. For the private sector, the General Manager could start/join the business before or

after he/she joins the Party. After Deng Xiaoping's Southern Tour of 1992, more and more Party members and government employees quit their Party/government posts to enter the promising private sector. One important reason for the turnover is to leverage their connections with key Party and government officials. Either case, the Party leader/member identity indicates close personal and political ties with the Party.

Table 1 presents a distribution of firms with bank loans and those with a Party leader. All firms fall in one of the four categories: (1) politically connected and has a bank loan, (2) not connected but has a bank loan, (3) politically connected without a bank loan, and (4) not connected, no loan. All rows add up to 1 for each city. In Central, Northeast and Northwest, banks seem to favor politically connected firms more obviously judging from percentages.

3.4 Control Variables

Chinese private business is characterized by high ownership concentration and the manager is often the majority owner of the firm. For smaller and younger private enterprises, top managers play a vital role in the firm's survival and prosperity. Managers generally offer two types of resources: human capital as indicated by their experience (Eisenhardt and Schoonhoven, 1990; McGee et al., 1995) and social capital as indicated by their externalities (Granovetter, 1985; Shane and Cable, 2002). The questionnaire contains information about the

background of the general manager. For my purpose, I constructed two variables to measure the human capital of the General Manager. **Education** is a dummy coded as 1 when the General Manger has a college degree or above and 0 otherwise. **Managerial Experience** is the number of years served as a General Manager in any company.

Firms with good performance should have better access to bank loans. My measures of growth opportunities and firm performance are **Sales Growth [1999-2000]** and **ROA**. Sales growth is computed as the percentage change in firm sales from 1999 to 2000. ROA is measured as EBIT over the book value of total assets in 2000.

I construct **Size** as the natural logarithm of total book assets in 2000. Size may be positively related to reputation and the level of firm-specific information disclosure to the public (Diamond, 1991). Also, larger firms may be less risky. **Leverage** is calculated as the book value of total liabilities over the book value of total assets in 2000 as an indicator of the financial situation of the firm. **Age** is included in natural logarithm in the regression as older firms may be considered less risky as it has already built up a certain track record.

Length is the number of years that the firm has done business with its primary bank. The longer the relationship, the less information asymmetry there

should be (Petersen and Rajan, 1994). China does not have a credible credit rating service, so I utilize an alternative measure called **Audit** which takes the value of 1 if the firm has its financial statement audited every year. It is an indicator of the credibility of the financial statement which should make it easier for credit analysts to screen out good applicants from bad ones.

Region indicators represent five regions of China: Coastal, Central, Northeast, Northwest and Southwest. Southwest is the reference category. I also include nine **Industry** dummy variables representing ten industry sectors.

3.5 Methodology

The empirical analysis in this paper consists of two parts. First, whether politically connected firms get preferential treatment in bank financing. In the regression analysis that follows, my basic regression model is:

$$BANK\ LOAN/COLLATERAL_{it} = \alpha_i + \beta_1\ [POLITICAL\ CONNECTIONS]_{it} + \beta_2\ [FIRM\ CHARACTERISTIC]_{it-1} + \beta_3\ [MANAGER\ CHARACTERISTICS]_{it} + \beta_4\ [INDUSTRY\ EFFECTS]_{it} + \beta_5 [REGION\ INDICATOR]_{it} + \varepsilon_{it}$$

Logistic regression is the main estimation method, and all the quantitative measures on the right hand side of the equation enter the regression in lags to mitigate simultaneity issues. SOEs and private, non-listed firms are singled out from the whole sample for analysis in this part. Ownership is a complicated issue

in China. Apart from the clear contrast of SOEs and private firms, there is a grey area of various types of firms whose ownership cannot be clearly identified. SOEs and private firms together account for 55% of all firms out of 2400. The rest 8 types account for 45%. I do not have detailed information on ownership of these 8 types. For example, collective firm is actually a hybrid ownership form which appeared early in transition and will probably go to extinction as transition progresses. So I include SOEs and private firms for a clean test. There are 676 private firms and 635 SOEs in the sample, but the number is reduced due to missing data in the regression analysis.

For the growth analysis, I use a residual plot method to partial out the effect of non-connected lending to private firms on economic growth. The procedure will be detailed in section 4.5.

3.6 Summary Statistics

Table 2 reports sample statistics for main variables used in the regressions and reveals some interesting differences between SOEs and private firms. Panel A starts with the statistics for financing variables. The table shows that 20% of private firms have access to bank loans compared with 23 % of SOEs. SOEs also do business with more banks and put a lower level of collateral. In Panel B, I provide the summary statistics for the political connections variables. Private firms have a much lower ratio in both Party leader and Party membership. 17% of

private firm managers are Party leaders and 43% are Party members while the corresponding figures for SOEs are 71% and 90%. Panel C pertains to firm-level control variables, where I always use lagged data for quantitative variables to mitigate simultaneity concerns. Table 2 also highlights the performance difference between private firms and SOEs. Private firms grow faster (123% for the mean private firms, as opposed to 35% of SOEs) and enjoy a higher ROA (4% for mean private firms, compared with -1% for mean SOE). SOEs also have higher leverage, longer relationship with banks, more credible financial statements, more educated managers and in general bigger and older.

Chapter 4: Main findings

4.1 Access to Bank Loans and Political Connections

In this subsection, I examine the effect of political connections on access to bank loans. If as I argued earlier that Party leadership/membership is an important political connection in China, it might help firms to gain access to the credit market.

Table 3 shows Pearson correlation coefficients between dependent variables and main independent variables. In the private sample, all four dependent variables are positively correlated with Party leader and Party member. The correlations between Party leader and Bankloan, Collateral and Numbank are statistically significant. So does Party member and Colvalue. In the SOE sample, Party leader positively and significantly correlated with Bankloan, Collateral, and Numbank. So does Party member and Bankloan.

Table 4 presents logistic regression for the hypothesis that leadership position in the Party leads to preferential access to bank loans. I regress Bankloan, the existence of bank loans on two dummy variables-Party leadership and Party membership respectively. The coefficient measures the impact of political connections on obtaining bank loans. A positive (negative) value means that politically connected firms are more (less) likely to get bank loans. I also include

several regressors to control for firm and manager characteristics. Because I do not have accounting data for some firms, the size of the sample decreases a little in both private and SOE sample. Finally, I control for industry and region effects. Heteroskedasticity-robust standard errors are shown in parentheses.

Column 1 in Table 4 reports the estimates of the existence of bank loans regressed on Party leadership position and all control variables. Manager being a Party leader significantly increases the firm's chance to get bank loans. Size also has positive effects meaning bigger firms are more likely to get bank loans. This is consistent with the literature that large firms are less risky and young firms suffer from liability of newness and smallness. Education has a negative effect on bank loans which is confusing. My speculation is that manager's human capital is not as important as social capital in doing business in China. Audit has a positive and significant effect as it is a strong mitigation of the information asymmetry problem prevalent between banks and private firms. None of the performance measures is significant, confirming the lack of efficiency in credit allocation. Column 2 shows that Party member has a positive but insignificant effect on bank loans. Bank credit is a scarce resource especially when financial market is underdeveloped, thus, the extension of bank credit is not only influenced by the existence of political connection but also by the strength of the connection. Being a Party leader is more powerful than being a Party member. In Column 3, I put both Party leader and Party member into the regression as a robustness check.

Party leader is still significant. Column 4-6 reports the same set of regression in SOEs, neither Party leader nor Party member is significant. As shown in the summary statistics, general managers in SOEs are almost by default party members and a large majority of them are Party leaders which makes such connections common and value-reduced.

Next, I use a less direct measure of access to bank credit-the number of banks that the firm do business with. Ideally, more banks suggest a higher possibility of obtaining bank loans. I do not use the number of banks directly, but constructed a variable **Numbank** from it. Numbank is defined as 0 when the firm answers 0, 1 when the firm's answer is between 1 and 3, and 2 if the answer is bigger than 3. This measure subjects to some noise in that firms that have a reliable access to one or two particular banks may not need to develop relationship with more banks as it is costly and time-consuming for both the firm and the bank. The firm needs to signal its quality and the bank needs to screen and monitor. So it is highly possible that there is an optimum number of banks, not the more, the better. Table 5 gives the ordered logit regression of category on political connections. Party leader and Party member appear to be positive in all regressions but only Party leader is significant in SOE sample. Younger and bigger firms tend to have business relations with more banks.

In summary, the results support the notion that in the context of China, political connection is an important mechanism to mitigate the adverse

environment that private firms face and help them to access critical resources like external finance. Chinese private entrepreneurs who are well-connected with the Party and the government are more likely than those without these ties to be able to obtain favorable treatment from it, such as securing bank loans. On the other hand, Party affiliation is very common among SOE managers. They are almost by default Party members and many of them are bureaucrats. It is therefore hard to detect the effects of Party affiliation for SOEs.

4.2 Loan Terms: Collateral and Maturity

In this subsection, I study the effect of political connections on the terms of bank loans given that the firm has a loan. More specifically, I test whether collateral is required for obtaining the loan, the amount of the collateral required as a percentage of loan value and the maturity of the loan. These tests help us to understand in more detail in what ways political connections work.

I basically redo the tests specified in the Bankloan regression in Table 4 with collateral as the dependent variable. To avoid simultaneity issues, I single out firms which had a recent loan, meaning that the loan was approved in 2001 or 2002. As our independent variables are mostly of the year 2000, any loan approved before that is not suitable to be included in the regression. This procedure plus missing data reduce the sample to less than half of the original. Table 6 show the result of the logistic regression of collateral on political

connections. Negative (positive) value on the coefficients mean that it is less (more) likely banks ask for collateral. The sign of Party leader and Party member in private firms are negative, but none is significant. Party member, however, has a positive effect in SOE sample.

Next, in Table 7, I investigate the impact of political connections on collateral value with an OLS regression. The dependent variable is the collateral value as a percentage to the loan value. The sample is further reduced to about 130 due to missing data on the basis of the sample used in the previous regression. Political connections do not affect collateral value in SOEs. Neither does Party leader in the private sample; however, Party member has a positive effect on collateral value. Besides this, older firms managed by more experienced managers tend to put less collateral.

Finally, in Table 8, I study the effect of political connections on the duration of long-term loan. We can see from the result that Party leader and Party member have a negative sign in both the private firm sample and SOE sample. However, none of these are significant. From summary statistics, the mean of Maturity in the private sample is 18.24 months, which is significantly lower than the SOE sample mean of 30.05 months. So banks tend to extend longer-term loans to SOEs in general, and political connections do not seem to be of vital importance in the duration of loans.

In summary, there is no definite evidence that politically connected firms have been treated more favorably in loan terms regarding collateral requirement and maturity. The banks might think the extension of credit is already a big favor given the highly competitive market for getting bank loans. Besides, the default rate is quite high in China, so the banks might hold on to collateral as a self-protection mechanism.

4.3 Subsample Analysis: Firms with External Financing Needs

In this survey, firms are requested to give reasons why they do not apply for loans in the survey. The firms report six reasons for not applying for a loan: *Do not need loans, Application procedures for bank loans are too cumbersome, Collateral requirements of bank loans are too stringent, Did not expect to be approved, Interest rates are too high,* and *Corruption in the allocation of bank credit*. The reasons reported are not mutually exclusive. If a firm really does not need bank loans, my measure Bankloan may subject from some noise that the firm might be able to get bank loans but choose not to, which is not very economically rational as bank financing is cheaper comparing to other external sources. Nevertheless, I drop the firms that claim they do not need loans from the sample. This should give us a cleaner test of the access hypothesis.

Table 9 presents the results of the logistic regression with firms that need loans. The specification is the same as in Table 4. The results are qualitatively

similar to Table 4. Party leader has a significant positive impact on access to bank loans in private firms.

4.4 Subsample Analysis: Firms in Different Regions

In this subsection, I examine the effect of political connections on the access to credit for private firms in different localities. I split the private-firm sample to five geographic regions and test the access hypothesis separately in each region. My intention is to see if there are any regional differences in bank behavior responding to political connections. In the theory, the effects should be greater in regions with weaker institutions.

Table 10 shows that Party leader have strong positive effects on access to bank loans in Coastal, Central and Northeast region. Northwest region has too few observations, but previous summary statistics show that the effect is strong in Northwest, so the only exception is Southwest with a positive but not significant effect. I have also regressed Bankloan on Party member in private firms (results not reported), only in Northeast is the coefficient positively significant. In general, the results confirm the positive relation between Party leadership and access to bank loans. The strength of this relationship, however, seems to be different across regions with strongest effect in Northeast, and weakest in Southwest. Coastal and Southwest regions are believed to have better institutions (Dollar et al., 2004) and they enjoy the highest level of bank financing in private sector

(29% and 21% respectively) while Northeast has the lowest level of bank financing in private firms (14%). it is not surprising that the Southwest has a weak effect. What seems a little mysterious is the strong effect of Party leader in Coastal region, the most economically developed and open region. So far, I have not come up with a satisfactory explanation of this phenomenon, which leaves it an interesting question for future research.

4.5 Robustness Check: Heckman's Lambda Approach

In this part, I provide some further robustness check to my base results. It is difficult to establish causality in a cross-sectional study. One might suspect that both political connections as well as access to bank loans are somewhat related to a time-invariant unobserved heterogeneity by difference in firm capability (Managerial capability). This is a valid concern and I tackle this problem with **Heckman's lambda approach**. First, I run a probit regression to predict the likelihood that a firm has political connections. The result is in Table 11. Party leader is used as the dependent variable. If the CEO is a Party leader, then this firm is identified as having political connections. I try two specifications: Column (1) regresses Party leader on log of firm age, years of managerial experience of the CEO and the education level of the CEO. Column (2) regresses Party leader on log of firm assets, years of managerial experience of CEO and the education level of the CEO. From the results, it seems Column (1) fits slightly better than Column (2).

Then I obtain the predicted probability (Heckman's lambda) of a firm having political connection from the two specifications respectively (P1 and P2). In the following analysis, I rerun all the critical regressions in the paper with P1 included as an independent variable. (I also run the same regressions with P2, but the results are qualitatively the same, so only regressions with P1 are reported here.)

Table 12 presents the results of regressions with five different dependent variables with Heckman's Lambda. Column (1) shows that Party leader is still highly significant in helping private firms to get bank loans. This proves the robustness of our primary results in the original paper that political connections do induce favorable treatment from state-owned banks. Column (2) corresponds to Table 5. The result is consistent that Party leader is positive but insignificant in explaining the number of banks that firms do business with. Column (3), corresponding to Table 6, investigates whether collateral is required in obtaining bank loans. In Table 6, the coefficient of Party leader is negative and insignificant but here it is positive and significant. This is the only inconsistency after applying Heckman's lambda approach. Column (4) on collateral value (corresponding to Table 7) and Column (5) (corresponding to Table8) on maturity of long-term loans maintain their signs and insignificance from OLS regression.

4.6 Growth Analysis

Many economists believe that the development of financial system is a robust determinant of long run economic growth (see Levine, 1997; Rajan and Zingales, 1998; Levine et al., 2000). McMillan and Woodruff (2002) conjecture that as the transition progresses, market supporting institutions will take increasingly important role. The ultimate goal of a well-functioning financial system is to reallocate capital to projects with highest returns. Yet, plenty of evidence shows that the process of allocating financial resources is distorted by various factors other than economic merit. Take banks for example, in most countries, banks are the single most important source of external financing. La Porta et al. (2002) document that government ownership of banks is very common outside the United States which makes them vulnerable to bend over to political concerns. Dinc (2005) shows that government-owned banks increase their lending in election years relative to private banks. Sapienza (2004) finds that the interest rates charged by government-owned banks in Italy reflect the local power of the party that controls the bank.

Economic policies and political support are endogeneous (Krueger, 1993). Political support of special intersts influence policy making which casts out opposing forces and results in long run economic deterioration. According to Hellman et al. (2003) a capture economy has emerged in many transition economies, where rent-generating advantages are sold by public officials and politicians to private firms. State capture is associated with social costs in the form

of weaker economy-wide firm performance. Morck et al. (2005) also reviews evidence that economic entrenchment affects rates of innovation, economywide resource allocation, and economic growth. One way for the interest group to continue their economic dominance is to control financial resources or even oppose financial development. In their study of the financial development of twentieth century, Rajan and Zingales (2003) suggest that incumbents, in the financial sector and in industry, use financial repression as a way to protect incumbent rent and to batter the entry of new comers.

Private sector is clearly the engine of economic growth in China. However, they have not been treated fairly in the market. The results above show that politically-connected private firms are more likely to get loans. Is this allocation of financial resources efficient? In other words, is it good or bad for economic growth? To tackle this problem, I construct a variable X, which is defined as the percentage of private firms that have bank loans but without political connections.

There are 18 cities belonging to 15 provinces in the sample. So I did a provincial level study. Three growth measures are used: (1) average sales growth rate from 2001 to 2002 in a province; (2) GDP growth rate in 2003; (3) GDP growth rate in 2004. I regress the three measures on X, controlling for GDP per capita 2002. Table 13 shows that X has significant positive influence for sales

growth after controlling for GDP per capita. GDP per capita is a strong predictor of GDP growth. X is positively related to GDP growth, but not significant.

To further partial out the effects of X on growth, the following procedures are applied.

(1) Regress GDP growth rate in 2003 and 2004 on GDP per capita in 2002 and obtain the residuals from this regression. Res1 are the residuals obtained from regressing GDP growth rate in 2003 while Res2 are the residuals of 2004.

(2) Regress X on GDP per capita in 2002 and obtain the residuals-Res3 from the regression.

(3) Regress Res1 and Res2 on Res3 and plot the relationship as shown in Figure 1 and Figure 2.

From the two figures, we can see that Res1 and Res2 tend to be positively associated with Res3, which translates into the fact that non-connected lending tends to be positively related to GDP growth. Though the results here are only indicative due to the small sample size, I propose that the bank credit extended to connected firms are not very efficient. Wurgler (2000) has provided evidence that sound capital institutions and markets, effectively check capital misallocation. In China's case, the mechanism of banking system seems to hamper the efficient allocation of capital. Allocating more credit to non-connected private firms might be a way to further stimulate economic growth. When political considerations

outweigh competition and efficiency, it generally implies welfare loss to the society. The largest financial gains were often made by those linked to the party-state bureaucracy, not by those individuals who work independently of the state. The close relationship between power and money has created new vested interests, which may block further loosening of state power. The underdevelopment of a fair and open market could do real harm as China's transition progresses.

Chapter 5: Conclusion

Literature has suggested that external financing-bank loans in particular, is an important channel for connected firms benefit from political favors. This paper corroborates other studies by adding a piece of evidence in the biggest transition economy where the government still possesses considerable control over the allocation of critical resources and political connections are extremely valuable. I found robust evidence that for private firms, the General Manager being a Party leader helps the firm to access bank loans. Membership in the Party alone does not have much effect on obtaining bank loans. The study has not found direct evidence that politically connected private firms have got better loan terms like collateral requirement and duration of loans, nor do they have access to more banks. In the growth analysis, the paper offers preliminary proof that non-connected lending is beneficial to economic growth.

There are many interesting questions that could be explored along the line of this paper. For example, the paper only documents the effect of formal political connections by Party involvement. Political connections can exist in various ways depending on the economic and social environment of the country studied. Future research may reveal other formal/informal kinds of political connections and how they work in different times and situations. Because this study only has cross

section data, it was not possible to see the evolution of the nexus between power and money. Also, most studies focus on the benefits of political connections; we could expand the understanding of political economy by documenting the liabilities encountered by connected firms. Finally, the paper detects some geographical difference in the politically-connected lending which deserves a more thorough and careful study of their reasons and implications for financial and economic development.

Reference

Agrawal, A., & Knoeber, C. R. (2001). Do Some Outside Directors Play a Political Role? *Journal of Law and Economics,* 44(1), 179-198.

Allen, F., Jun Qian., & Meijun Qian. (2005). Law, Finance, and Economic Growth in China. *Journal of Financial Economics,* 77(1), 57-116.

Ayyagari, M., Demirguc-Kunt, A., & Maksimovic, V. (2007). Formal versus Informal Finance: Evidence from China. *Working paper.*

Barney, JB. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management,* 17(3), 99-120.

Bian, Y., Shu, X., Logan, J. (2001). Communist Party Membership and Regime Dynamics in China. *Social Forces,* 79(3), 805-841.

Brandt, L., Li, H. (2003). Bank Discrimination in Transition Economies: Ideology, Information or Incentives? *Journal of Comparative Economics,* 31(3), 387-413.

Charumilind, C., Kali, R., & Wiwattanakantang, Y. (2006). Connected Lending: Thailand before the Financial Crisis. *Journal of Business,* 79(1), 181-217.

Claessens, S., Feijen, E., & Laeven, L. (2008). Political Connections and Preferential Access to Finance: The Role Of Campaign Contributions. *Journal of Financial Economics,* 88(3), 554-580.

Claessens, S., & Laeven, L. U. C. (2003). Financial Development, Property Rights, and Growth. *Journal of Finance,* 58(6), 2401-2436.

Cull, R., & Xu, L. C. (2003). Who Gets Credit? The Behavior Of Bureaucrats and State Banks in Allocating Credit to Chinese State-Owned Enterprises. *Journal of Development Economics,* 71(2), 533.

Cull, R., & Xu, L. C. (2005). Institutions, Ownership, and Finance: The Determinants of Profit Reinvestment Among Chinese Firms. *Journal of Financial Economics,* 77(1), 117-146.

Demirguc-Kunt, A. and Maksimovic, V. (1998). Law, Finance, and Firm Growth, *Journal of Finance*， 53(6), 2107-2137.

De Soto, Hernando. (1989). *The Other Path: The Invisible Revolution in the Third Worlds.* New York: Harper and Row Publishers.

Diamond, D. W. (1991). Monitoring and Reputation: The Choice between Bank Loans and Directly Placed Debt. *Journal of Political Economy*, 99(4), 689.

Dinc, I. S. (2005). Politicians and Banks: Political Influences on Government-Owned Banks in Emerging Markets. *Journal of Financial Economics*, 77(2), 453-479.

Dollar, D., Wang, S., Xu, C., Shi, A. (2004). Inproving City Competitivenness through the Investment Climate: Ranking 23 Chinese Cities. *World Bank Working Paper Series.*

Eisenhardt KM, Schoonhoven CB. (1990). Organizational Growth: Linking Founding Team, Strategy, Environment, and Growth among U.S. Semiconductor Ventures, 1978–1988. *Administrative Science Quarterly*, 35(3), 504–529.

Faccio, M. (2006). Politically Connected Firms. *The American Economic Review*, 96(1), 369-386.

Faccio, M., Masulis, R. W., & McConnell, J. J. (2006). Political Connections and Corporate Bailouts. *The Journal of Finance,* 61(6), 2597-2635.

Farrell, D., Lund, S., Rosenfeld, J., Morin, F., Gupta, N., Greenberg, E. (2006). Putting China's Capital to Work: The Value of Financial System Reform, *McKinsey Global Institute Report*

Fisman, R. (2001). Estimating the Value of Political Connections. *American Economic Review*, 91(4), 1095-1102.

Granovetter MS. (1985). Economic Action and Social Structure: The Problem of Social Embeddedness. *American Journal of Sociology,* 91(3), 481–510.

Guriev, S. (2004). Red Tape and Corruption. *Journal of Development Economics,* 73, 489–504.

Hellman, J. S., Jones, G., & Kaufmann, D. (2003). Seize the State, Seize the Day: State Capture and Influence in Transition Economies. *Journal of Comparative Economics,* 31(4), 751-773.

Johnson, S., McMillan, J., & Woodruff, C. (2002). Property Rights and Finance. *American Economic Review,* 92(5), 1335-1356.

Johnson, S., & Mitton, T. (2003). Cronyism and Capital Controls: Evidence from Malaysia. *Journal of Financial Economics,* 67(2), 351-382.

Krueger, A. (1993). Virtuous and Vicious Circles in Economic Development, Papers and Proceedings of the American Economic Association, LXXXIII, 351-356.

Khwaja, A. I., & Mian, A. (2005). Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market. *Quarterly Journal of Economics,* 120(4), 1371-1411.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A.. (2002). Government Ownership of Banks. *Journal of Finance,* 57 (1), 256–301.

Levine, R. (1997). Financial Development and Economic Growth: Views and Agenda. *Journal of Economic Literature,* 35(2), 688-726.

Levine, R., Loayza, N., Beck, T. (2000). Financial Intermediation and Growth: Causality and Cause. *Journal of Monetary Economics*, 46(1), 31-77.

Li, H., Meng, L., Wang, Q., & Zhou, L.A. (2008). Political Connections, Financing and Firm Performance: Evidence from Chinese Private Firms. *Journal of Development Economics,* 87(2), 283-299.

Li, H., Meng, L., & Zhang, J. (2006). Why Do Entrepreneurs Enter Politics? Evidence from China. *Economic Inquiry,* 44(3), 559-578.

McGee JE, Dowling MJ, Megginson WL. (1995). Cooperative Strategy and New Venture Performance: The Role Of Business Strategy And Management Experience. *Strategic Management Journal,* 16(7), 565–580.

McMillan, J., & Woodruff, C. (1999). Interfirm Relationships and Informal Credit In Vietnam. *Quarterly Journal of Economics,* 114(4), 1285-1320.

McMillan, J., & Woodruff, C. (2002). The Central Role of Entrepreneurs in Transition Economies. *Journal of Economic Perspectives,* 16(3), 153-170.

Nee, V. (1992). Organizational Dynamics of Market Transition: Hybrid Forms, Property Rights, and Mixed Economy in China. *Administrative Science Quarterly,* 31(1*),* 1-27.

Petersen, M. A., & Rajan, R. G. (1994). The Benefits of Lending Relationships: Evidence from Small Business Data. *Journal of Finance,* 49(1), 3-37.

Morck, R., Wolfenzon, d., & Yeung, B. (2005). Corporate Governance, Economic Entrenchment, and Growth. *Journal of Economic Literature,* Vol. XLIII, 657–722.

Rajan, R. G., & Zingales, L. (1998). Financial Dependence and Growth. *American Economic Review,* 88(3), 559-586.

Rajan, R. G., & Zingales, L. (2003). The Great Reversals: The Politics of Financial
Development in The twentieth Century. *Journal of Financial Economics,* 69, 5-50.

Ramalho, R. (2007). The Persistence of Corruption: Evidence From the 1992 Presidential Impeachment in Brazil. Working paper, world bank.

Sapienza, P. (2004). The Effects of Government Ownership on Bank Lending. *Journal of Financial Economics,* 72(2), 357-384.

Shane, S., & Cable, D. (2002). Network Ties, Reputation, and the Financing of New Ventures. *Management Science,* 48(3), 364–381.

Shleifer, A., & Vishny, R. W. (1994). Politicians and Firms. *The Quarterly Journal of Economics,* 109(4), 995-1025.

Shleifer, A. (1997). Government in Transition. *European Economic Review*, 41(3), 385–410.

Stiglitz, J. E., & Weiss, A. (1981). Credit Rationing in Markets with Imperfect Information. *American Economic Review,* 71(3), 393.

Wurgler, Jeffrey. (2000). "Financial Markets and tAllocation of Capital." *Journal of Financial Economics,* 58(1–2), 187–214.

Xin, K. R., & Pearce, J. L., (1996). Guanxi: Connections as Substitutes for Formal Institutional Support. *The Academy of Management Journal,* 39(6), 1641-1658.

Table 1. Bank loans and Party leadership positions of general managers

The table gives the distribution of bank loans and Party leader managers in 18 cities respectively. Column 1 presents firms that have a bank loan and the general manager is a Party leader and Column 2 are firms that have a bank loan and the general manager is not a Party leader.

	Bank loan		No bank loan	
City	Party leader	No party leader	Party leader	No party leader
Southwest				
Chongqing	0.188	0.154	0.221	0.436
Guiyang	0.076	0.110	0.398	0.415
Kunming	0.100	0.193	0.329	0.379
Nanning	0.052	0.074	0.281	0.593
Coastal				
Hangzhou	0.237	0.206	0.206	0.351
Jiangmen	0.061	0.071	0.286	0.582
Shenzhen	0.097	0.151	0.237	0.516
Wenzhou	0.084	0.274	0.021	0.621
Central				
Changsha	0.127	0.070	0.331	0.472
Nanchang	0.137	0.137	0.331	0.396
Wuhan	0.134	0.054	0.336	0.477
Zhengzhou	0.074	0.094	0.255	0.577
Northeast				
Benxi	0.128	0.053	0.447	0.372
Changchun	0.097	0.069	0.396	0.438
Dalian	0.182	0.136	0.295	0.386
Haerbin	0.079	0.057	0.457	0.407
Northwest				
Lanzhou	0.101	0.076	0.361	0.462
Xi'an	0.097	0.153	0.313	0.438

Table 2. Summary statistics of main variables

This table presents summary statistics for the private firm sample and the SOE sample. *Length, Firm age, and Managerial experience* enter in natural logarithm.

		Private			SOE	
Variable	Obs.	Mean	sd.	Obs.	Mean	sd.
Panel A: dependent variables						
Bankloan	623	0.20	0.40	596	0.23	0.42
Collateral	623	0.33	0.47	596	0.35	0.48
Colvalue	201	78.82	47.27	201	71.17	46.80
Numbank	676	1.11	0.40	635	1.26	0.51
Maturity	249	18.57	15.24	273	30.21	23.96
Panel B: Political connections variables						
Party leader	623	0.17	0.37	596	0.71	0.45
Party member	623	0.43	0.50	596	0.90	0.30
Panel C: Control variables						
Sales growth [1999-2000]	583	1.23	4.55	575	0.35	1.28
ROA [2000]	622	0.04	0.22	595	-0.01	0.11
Leverage [2000]	622	0.56	0.31	596	0.65	0.33
Length (log)	618	1.81	0.60	584	2.53	0.85
Audit	623	0.55	0.50	596	0.81	0.39
Firm age (log)	623	1.98	0.51	595	2.98	0.86
Size	622	8.37	1.69	596	10.63	1.99
Education	623	0.77	0.42	596	0.90	0.29
Managerial experience (log)	623	1.94	0.54	595	1.64	0.63

Table 3. Pearson correlation coefficients between bank finance and political connections

This table reports correlations between bankloan, collateral, colvalue, numbank and political connections for private firms and SOEs. *P*-values are reported between brackets.

Panel A. Private Firms

Variable	Bankloan	Collateral	Colvalue	Numbank	Party leader
Collateral	0.52				
	(0.00)				
Colvalue	0.07	.			
	(0.31)	(0.00)			
Numbank	0.10	0.19	0.06		
	(0.01)	(0.00)	(0.42)		
Party leader	0.14	0.11	0.05	0.08	
	(0.00)	(0.01)	(0.44)	(0.05)	
Party member	0.01	0.02	0.18	0.05	0.51
	(0.78)	(0.60)	(0.01)	(0.19)	(0.00)

Panel B. SOEs

Variable	Bankloan	Collateral	Colvalue	Numbank	Party leader
Collateral	0.38				
	(0.00)				
Colvalue	0.03	.			
	(0.64)	(0.00)			
Numbank	0.23	0.21	-0.08		
	(0.00)	(0.00)	(0.29)		
Party leader	0.11	0.07	-0.04	0.10	
	(0.01)	(0.10)	(0.58)	(0.02)	
Party member	0.07	0.04	0.00	0.06	0.51
	(0.08)	(0.33)	(0.97)	(0.18)	(0.00)

Table 4. Impact of political connections on access to bank loans

The dependent variable *Bankloan* is a dummy variable which takes the value of one if the firm has a bank loan as of early 2003. *Party leader (member)* is a dummy variable equal to one if the general manager is a Party leader (member). *Sales growth* is the percentage change in sales from 1999 to 2000. *ROA* is EBIT over total assets in 2000. *Leverage* is total liabilities over total assets in 2000. I measure the *size* of the firm by logarithm of total assets in 2000. *Log length* is the natural logarithm of the years that the firm has done business with its primary bank. *Audit* is a dummy variable which takes the value of one if the firm has its financial statement audited every year. *Log firm age* is the natural logarithm of the years that the firm has been founded. *Education* is a dummy variable that takes the value of one if the general manager has a college degree or above. *Log experience* is the natural logarithm of the number of years that the general manger has been a general manager in any firm. All regressions include industry and region dummies. Heteroskedasticity-robust standard errors are in brackets. ***, **, * indicate statistically significant at the 1%, 5%, and 10% level, respectively. Model (1)-(3) reports the results for private firms. Model (4)-(6) report the results for SOEs. LR-test is a statistic to test the hypothesis that all the explanatory variables are jointly zero.

	Bankloan					
		Private			SOE	
Variable	(1)	(2)	(3)	(4)	(5)	(6)
Party leader	1.005***		1.164***	0.156		0.0144
	(0.297)		(0.367)	(0.276)		(0.317)
Party member		0.309	-0.223		0.445	0.434
		(0.239)	(0.303)		(0.443)	(0.509)
Sales growth	-0.00125	0.00325	-0.00126	-0.009	-0.008	-0.008
	(0.0256)	(0.0269)	(0.0253)	(0.094)	(0.0937)	(0.0939)
ROA	0.646	0.653	0.633	1.018	0.964	0.966
	(0.445)	(0.442)	(0.444)	(1.039)	(1.016)	(1.015)
Leverage	0.0979	0.0577	0.0995	0.0958	0.0955	0.0951
	(0.405)	(0.402)	(0.404)	(0.365)	(0.363)	(0.363)
Log length	-0.0885	-0.0381	-0.0821	0.0950	0.0966	0.0958
	(0.195)	(0.194)	(0.197)	(0.152)	(0.153)	(0.152)
Audit	0.434*	0.486**	0.437*	-0.111	-0.112	-0.112
	(0.231)	(0.228)	(0.230)	(0.305)	(0.305)	(0.306)
Log firm age	-0.173	-0.0738	-0.182	0.368**	0.368**	0.367**
	(0.258)	(0.253)	(0.258)	(0.161)	(0.160)	(0.160)
Size	0.365***	0.367***	0.366***	0.416***	0.417***	0.417***
	(0.0888)	(0.0880)	(0.0890)	(0.0686)	(0.0683)	(0.0690)
Education	-0.919***	-0.872***	-0.894***	-0.605	-0.630	-0.632
	(0.288)	(0.299)	(0.292)	(0.420)	(0.415)	(0.416)
Log experience	0.179	0.240	0.178	0.226	0.225	0.225
	(0.239)	(0.235)	(0.238)	(0.172)	(0.172)	(0.172)

Table 4.
(continued)

Industry effects	Yes	Yes	Yes	Yes	Yes	Yes
Region indicator	Yes	Yes	Yes	Yes	Yes	Yes
Observations	525	525	525	545	545	545
p-value of LR-test	0.000	0.000	0.000	0.000	0.000	0.000

Table 5. Impact of political connections on the number of banks

The dependent variable *Numbank* is a categorical variable which takes the value 0 if a firm does not do business with any bank; 1 if a firm does business with one to three banks; 2 if a firm does business with more than three banks. Ordered logit model is used for estimation. Heteroskedasticity-robust standard errors are in brackets. ***, **, * indicate statistically significant at the 1%, 5%, and 10% level, respectively. Wald-test is a statistic to test the hypothesis that all the explanatory variables are jointly zero. Model (1)-(3) reports the results for private firms. Model (4)-(6) report the results for SOEs.

	Numbank					
	Private			SOE		
Variable	(1)	(2)	(3)	(4)	(5)	(6)
Party leader	0.502		0.434	0.547**		0.450
	(0.353)		(0.414)	(0.255)		(0.286)
Party member		0.274	0.101		0.628	0.291
		(0.252)	(0.297)		(0.439)	(0.500)
Sales growth	0.0131	0.0147	0.0130	-0.0589	-0.0508	-0.058
	(0.0256)	(0.0259)	(0.0258)	(0.0668)	(0.0659)	(0.0668)
ROA	0.895**	0.898**	0.903**	-1.792*	-2.020**	-1.849*
	(0.429)	(0.426)	(0.432)	(0.933)	(0.948)	(0.950)
Leverage	0.314	0.309	0.314	0.0374	0.0324	0.0350
	(0.370)	(0.370)	(0.371)	(0.370)	(0.372)	(0.372)
Log length	1.300***	1.311***	1.297***	0.586***	0.607***	0.585***
	(0.371)	(0.372)	(0.372)	(0.224)	(0.222)	(0.223)
Audit	0.754***	0.754***	0.750***	0.256	0.280	0.262
	(0.278)	(0.278)	(0.279)	(0.292)	(0.292)	(0.294)
Log firm age	-1.051***	-1.011***	-1.045***	-0.567***	-0.567***	-0.569***
	(0.343)	(0.343)	(0.344)	(0.175)	(0.174)	(0.175)
Size	0.331***	0.338***	0.331***	0.459***	0.473***	0.461***
	(0.0964)	(0.0947)	(0.0964)	(0.0646)	(0.0635)	(0.0646)
Education	0.129	0.121	0.120	-0.116	-0.0894	-0.135
	(0.309)	(0.315)	(0.313)	(0.431)	(0.433)	(0.434)
Log experience	0.0163	0.0263	0.0156	-0.341**	-0.328**	-0.342**
	(0.250)	(0.248)	(0.249)	(0.165)	(0.165)	(0.166)
Industry effects	Yes	Yes	Yes	Yes	Yes	Yes
Region indicator	Yes	Yes	Yes	Yes	Yes	Yes
Observations	577	577	577	563	563	563
p-value of Wald-test	0.000	0.000	0.000	0.000	0.000	0.000

Table 6. Impact of political connections on the requirement of collateral

The dependent variable *Collateral* is a dummy variable which takes the value of 1 if the firm is required to put collateral in obtaining the bank loans. Heteroskedasticity-robust standard errors are in brackets. ***, **, * indicate statistically significant at the 1%, 5%, and 10% level, respectively. Wald-test is a statistic to test the hypothesis that all the explanatory variables are jointly zero. Model (1)-(2) reports the results for private firms. Model (3)-(4) report the results for SOEs.

	Collateral			
	Private		SOE	
Variable	(1)	(2)	(3)	(4)
Party leader	-0.0359		0.369	
	(0.457)		(0.423)	
Party member		-0.0733		1.422**
		(0.380)		(0.657)
Sales growth	0.305*	0.304*	0.502	0.474
	(0.177)	(0.176)	(0.324)	(0.33)
ROA	0.794	0.781	-2.847	-3.502
	(0.969)	(0.952)	(2.219)	(2.287)
Leverage	-0.174	-0.158	-0.620	-0.600
	(0.626)	(0.643)	(0.627)	(0.638)
Log length	0.406	0.406	0.0397	0.0219
	(0.386)	(0.382)	(0.253)	(0.248)
Audit	0.764**	0.768**	0.335	0.319
	(0.386)	(0.385)	(0.528)	(0.529)
Log firm age	-0.220	-0.219	0.0967	0.0508
	(0.481)	(0.488)	(0.255)	(0.260)
Size	0.213*	0.211*	-0.0263	-0.0331
	(0.117)	(0.117)	(0.108)	(0.109)
Education	0.185	0.200	-0.0644	-0.0756
	(0.456)	(0.460)	(0.610)	(0.618)
Log experience	-0.118	-0.117	-0.174	-0.212
	(0.360)	(0.360)	(0.270)	(0.274)
Constant	-1.617	-1.591	-0.982	-1.663
	(1.464)	(1.476)	(1.739)	(1.684)
Industry effects	Yes	Yes	Yes	Yes
Region indicator	Yes	Yes	Yes	Yes
Observations	208	208	206	206
p-value of Wald-test	0.000	0.000	0.000	0.000

Table 7. Impact of political connections on the value of collateral required as percentage of loan value

The dependent variable *Colvalue* is the value of collateral required as percentage of loan value. OLS regression is used. Heteroskedasticity-robust standard errors are in brackets. ***, **, * indicate statistically significant at the 1%, 5%, and 10% level, respectively. Model (1)-(2) reports the results for private firms. Model (3)-(4) report the results for SOEs.

	Colvalue			
	Private		SOE	
Variable	(1)	(2)	(3)	(4)
Party leader	2.953		1.984	
	(11.05)		(12.30)	
Party member		18.53*		25.21
		(9.631)		(34.39)
Sales growth	-0.989	-1.032	0.969	0.888
	(1.228)	(1.166)	(7.675)	(7.764)
ROA	16.00	14.09	14.34	6.477
	(17.45)	(19.13)	(80.49)	(79.36)
Leverage	2.849	-1.120	9.941	9.871
	(17.81)	(17.67)	(18.40)	(17.82)
Log length	8.281	8.204	-1.943	-1.831
	(10.77)	(10.38)	(9.019)	(8.648)
Audit	8.340	5.241	11.69	13.76
	(9.833)	(9.550)	(12.55)	(12.53)
Log firm age	-19.85**	-20.73**	1.293	1.061
	(9.157)	(9.013)	(7.969)	(8.025)
Size	-0.292	0.402	-2.321	-2.315
	(3.531)	(3.317)	(3.276)	(3.316)
Education	-4.569	-7.647	-2.736	-4.859
	(12.55)	(12.54)	(14.83)	(14.39)
Log experience	-14.49*	-15.21*	8.585	7.689
	(8.157)	(7.933)	(7.126)	(6.966)
Industry effects	Yes	Yes	Yes	Yes
Region indicator	Yes	Yes	Yes	Yes
Observations	130	130	128	128
R-squared	0.288	0.315	0.114	0.122

Table 8. Impact of political connections on the maturity of long-term loan

The dependent variable *Maturity* is the average duration (measured in months) of long-term loans reported by firms. OLS regression is used. Heteroskedasticity-robust standard errors are in brackets. ***, **, * indicate statistically significant at the 1%, 5%, and 10% level, respectively. Model (1)-(3) reports the results for private firms. Model (4)-(6) report the results for SOEs.

		Private			SOE	
Variable	(1)	(2)	(3)	(4)	(5)	(6)
Party leader	-2.291		-1.766	-1.363		1.183
	(2.205)		(2.749)	(4.401)		(2.776)
Party member		-1.615	-0.818		-9.155	-9.993
		(1.891)	(2.348)		(12.24)	(11.86)
Sales growth	0.378	0.380	0.385	-0.984	-0.488	-0.549
	(0.270)	(0.258)	(0.269)	(2.528)	(2.317)	(2.308)
ROA	-1.012	-1.249	-1.102	-18.89	-16.02	-14.92
	(2.609)	(2.671)	(2.595)	(15.30)	(12.24)	(12.68)
Leverage	5.322	5.428	5.369	-5.177	-5.277	-5.102
	(3.531)	(3.548)	(3.543)	(8.736)	(8.441)	(8.539)
Log length	-0.415	-0.447	-0.368	1.228	1.248	1.156
	(1.311)	(1.298)	(1.308)	(2.009)	(2.061)	(2.039)
Audit	4.194**	4.175**	4.256**	-5.274	-4.840	-4.860
	(2.116)	(2.107)	(2.126)	(5.547)	(5.112)	(5.120)
Log firm age	3.155*	2.960	3.102	-2.677	-2.749	-2.761
	(1.903)	(1.870)	(1.881)	(2.427)	(2.350)	(2.356)
Size	0.475	0.488	0.474	3.204***	3.251***	3.199***
	(0.560)	(0.550)	(0.558)	(1.113)	(1.078)	(1.103)
Education	2.511	2.648	2.564	1.077	2.025	1.969
	(1.976)	(1.973)	(1.987)	(3.473)	(3.807)	(3.833)
Log experience	0.197	0.121	0.224	-2.760	-2.561	-2.553
	(1.679)	(1.631)	(1.666)	(1.841)	(1.873)	(1.880)
Region indicators	Yes	Yes	Yes	-2.373	-2.712	-2.709
Industry effects	Yes	Yes	Yes	9.345*	9.125	9.165*
Constant	6.589	7.087	6.703	0.650	6.033	6.786
	(7.900)	(7.867)	(7.896)	(9.078)	(11.95)	(11.76)
Observations	220	220	220	252	252	252
R-squared	0.203	0.202	0.204	0.105	0.112	0.113

Table 9. Impact of political connections on access to bank loans in firms with external financing needs

The dependent variable *Bankloan* is a dummy variable which takes the value of one if the firm has a bank loan as of early 2003. Heteroskedasticity-robust standard errors are in brackets. ***, **, * indicate statistically significant at the 1%, 5%, and 10% level, respectively. Wald-test is a statistic to test the hypothesis that all the explanatory variables are jointly zero. Model (1)-(3) reports the results for private firms. Model (4)-(6) report the results for SOEs.

	Bankloan					
	Private			SOE		
Variable	(1)	(2)	(3)	(4)	(5)	(6)
Party leader	0.562*		0.740*	0.170		0.0866
	(0.317)		(0.393)	(0.297)		(0.340)
Party member		0.0922	-0.254		0.323	0.259
		(0.270)	(0.337)		(0.456)	(0.523)
Sales growth	0.0161	0.0185	0.0148	-0.030	-0.029	-0.030
	(0.0346)	(0.0341)	(0.0345)	(0.0975)	(0.0974)	(0.0975)
ROA	0.433	0.416	0.420	0.971	0.914	0.936
	(0.486)	(0.480)	(0.484)	(1.330)	(1.293)	(1.308)
Leverage	-0.0346	-0.0496	-0.0625	-0.372	-0.385	-0.380
	(0.461)	(0.468)	(0.464)	(0.417)	(0.417)	(0.417)
Log length	0.130	0.170	0.135	0.155	0.162	0.156
	(0.229)	(0.228)	(0.232)	(0.163)	(0.163)	(0.163)
Audit	0.698***	0.750***	0.701***	-0.292	-0.287	-0.294
	(0.270)	(0.270)	(0.270)	(0.338)	(0.335)	(0.338)
Log firm age	-0.208	-0.162	-0.213	0.217	0.218	0.218
	(0.290)	(0.287)	(0.289)	(0.165)	(0.165)	(0.165)
Size	0.323***	0.318***	0.326***	0.365***	0.367***	0.365***
	(0.0989)	(0.0999)	(0.0994)	(0.0772)	(0.0769)	(0.0774)
Education	-1.206***	-1.156***	-1.171***	-0.720*	-0.727*	-0.737*
	(0.343)	(0.352)	(0.349)	(0.425)	(0.421)	(0.424)
Log experience	0.000953	0.0318	-0.00603	0.148	0.147	0.144
	(0.272)	(0.271)	(0.270)	(0.186)	(0.187)	(0.187)
Industry effects	Yes	Yes	Yes	Yes	Yes	Yes
Region indicator	Yes	Yes	Yes	Yes	Yes	Yes
Observations	358	358	358	403	403	403
p-value of Wald-test	0.000	0.000	0.000	0.031	0.031	0.041

Table 10. Impact of political connections on access to bank loans in different regions

The dependent variable *Bankloan* is a dummy variable which takes the value of one if the firm has a bank loan as of early 2003. Heteroskedasticity-robust standard errors are in brackets. ***, **, * indicate statistically significant at the 1%, 5%, and 10% level, respectively. Model (1)-(5) report results of the same regression in five regions.

	Bankloan				
Variable	(1) Southwest	(2) Coastal	(3) Central	(4) Northeast	(5) Northwest
Party leader	0.698	2.212***	1.185**	4.074**	16.18
	(0.707)	(0.694)	(0.552)	(1.720)	(0)
Sales growth	0.00146	-0.0542	0.138*	-0.357**	-2.771
	(0.0305)	(0.0853)	(0.0758)	(0.151)	(0)
ROA	1.475	0.0584	0.953	-1.224	366.4
	(1.369)	(0.884)	(0.742)	(4.933)	(0)
Leverage	-1.052	0.828	-0.294	1.250	-2.097*
	(1.074)	(1.143)	(0.710)	(1.791)	(1.210)
Log length	0.207	-0.00918	0.0149	-3.125**	-29.07
	(0.496)	(0.411)	(0.422)	(1.508)	(0)
Audit	0.179	0.174	0.875*	5.207***	42.64
	(0.606)	(0.667)	(0.470)	(1.581)	(0)
Log firm age	-0.874	-1.074	1.304**	-2.352***	43.81
	(0.619)	(0.668)	(0.591)	(0.834)	(0)
Size	0.634***	0.464**	0.160	1.210***	9.937*
	(0.210)	(0.231)	(0.152)	(0.414)	(5.294)
Education	-2.502***	-0.976*	-0.371	-4.760***	
	(0.871)	(0.583)	(0.589)	(1.573)	
Log experience	0.526	0.598	-0.125	-0.559	-4.771
	(0.601)	(0.579)	(0.420)	(0.910)	(16.66)
Industry effects	Yes	Yes	Yes	Yes	Yes
Observations	113	106	171	63	20
p-value of Wald-test	0.007	0.02	0.003	0.006	

Table 11. Probit regression-the likelihood that a firm has political connections

The dependent variable *Party leader* is a dummy variable equal to one if the general manager is a Party leader. Heteroskedasticity-robust standard errors are in brackets. ***, **, * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

	(1)	(2)
Variable	Party Leader	Party Leader
Log firm age	0.409***	
	(0.118)	
Log experience	0.205*	0.277**
	(0.115)	(0.113)
Education	0.270*	0.156
	(0.152)	(0.153)
Log assets		0.0848**
		(0.0366)
Constant	-2.416***	-2.357***
	(0.341)	(0.383)
Observations	623	622

Table 12. Robustness check-Heckman's lambda approach

P1 is Heckman's lambda from the previous step. The dependent variable *Bankloan* (column 1) is a dummy variable which takes the value of one if the firm has a bank loan as of early 2003. The dependent variable *Numbank* is a categorical variable which takes the value 0 if a firm does not do business with any bank; 1 if a firm does business with one to three banks; 2 if a firm does business with more than three banks. The dependent variable *Collateral* (column 3) is a dummy variable which takes the value of 1 if the firm is required to put collateral in obtaining the bank loans. *Colvalue* (column 4) is the value of collateral required as percentage of loan value. *Maturity* (column 5) is the average duration (measured in months) of long-term loans reported by firms. All regressions include industry and region dummies. Heteroskedasticity-robust standard errors are in brackets. ***, **, * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)
Variable	Bankloan	Numbank	Collateral	Colvalue	Maturity
Party leader	0.636***	0.433	0.398**	3.621	-2.368
	(0.173)	(0.389)	(0.162)	(8.256)	(2.203)
P1	-6.483	9.440	-2.293	250.0	31.03
	(5.415)	(13.10)	(5.129)	(289.3)	(58.67)
Sales growth	0.000625	0.00297	0.00998	-1.133	0.378
	(0.0167)	(0.0361)	(0.0139)	(0.978)	(0.272)
ROA	0.383	-0.152	0.598**	5.857	-0.988
	(0.285)	(0.751)	(0.288)	(12.77)	(2.600)
Leverage	0.0742	0.0293	0.121	-6.972	5.127
	(0.230)	(0.516)	(0.205)	(12.47)	(3.546)
Log length	-0.0683	1.348***	0.0760	7.152	-0.332
	(0.126)	(0.258)	(0.110)	(7.975)	(1.323)
Audit	0.241*	1.214***	0.135	11.79	4.284**
	(0.145)	(0.365)	(0.129)	(7.727)	(2.141)
Log firm age	0.648	-1.973	0.283	-42.93	-0.292
	(0.623)	(1.464)	(0.583)	(33.60)	(6.738)
Size	0.209***	0.225**	0.278***	-1.610	0.482
	(0.0477)	(0.108)	(0.0439)	(2.438)	(0.560)
Education	-0.118	-0.436	-0.219	-17.43	0.429
	(0.402)	(0.962)	(0.377)	(21.43)	(4.564)
Log experience	0.412	-0.474	0.0566	-29.77*	-1.380
	(0.300)	(0.723)	(0.284)	(16.63)	(3.302)
Region indicators	Yes	Yes	Yes	Yes	Yes
Industry effects	Yes	Yes	Yes	Yes	Yes
Constant	-3.674***		-3.032***	207.7***	12.77
	(1.198)		(1.124)	(65.49)	(13.23)
Observations	525	577	577	191	220
R-squared				0.253	0.204

Table 13. Impact of non-connected lending to private firms on GDP growth

The dependent variables are *GDP growth rate* in 15 provinces in 2003 and 2004 respectively. GDP per capita is GDP divided by the population of the province in 2002. X is the percentage of private firms that have bank loans but without party connections. Heteroskedasticity-robust standard errors are in brackets. ***, **, * indicate statistically significant at the 1%, 5%, and 10% level, respectively.

Variable	(1) Sales growth[2001-2002]	(2) GDP growth 2003	(3) GDP growth 2004	(4) Sales growth[2001-2002]	(5) GDP growth 2003	(6) GDP growth 2004
Non-connected lending	0.863	3.720	2.640	0.947*	5.267	3.651
	(0.578)	(6.921)	(3.612)	(0.480)	(5.307)	(2.392)
Log(GDP per capita)				0.122	2.255***	1.472***
				(0.0905)	(0.621)	(0.331)
Constant	0.202**	10.67***	12.12***	-0.892	-9.586*	-1.103
	(0.0908)	(0.820)	(0.516)	(0.783)	(5.347)	(2.946)
Observa-tions	15	15	15	15	15	15
R-squared	0.215	0.035	0.046	0.320	0.347	0.397

Figure 1. GDP growth rate (2003) and non-connected lending

Res1 are the residuals obtained from regressing GDP growth rate in 2003 on GDP per capita in 2002. Res3 are the residuals from regressing the percentage of non-connected lending on GDP per capita in 2002. Res1 is plotted against Res3, which illustrates the positive effect of non-connected lending to GDP growth.

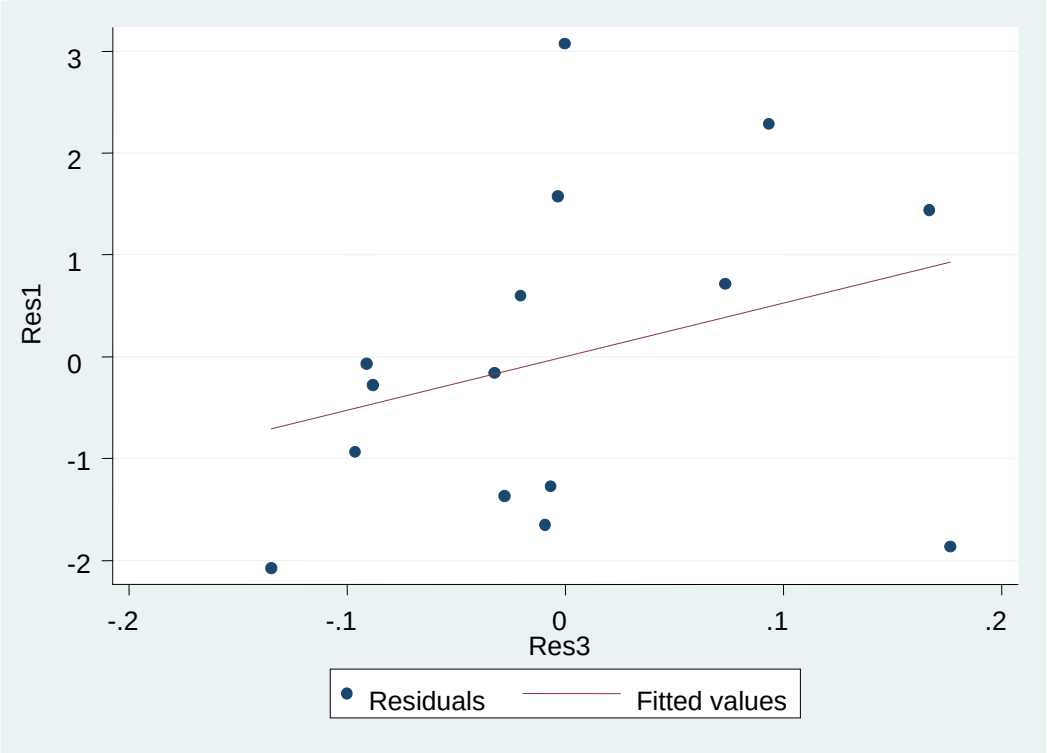

Figure 2. GDP growth rate (2004) and non-connected lending

Res2 are the residuals obtained from regressing GDP growth rate in 2004 on GDP per capita in 2002. Res3 are the residuals from regressing the residuals from regressing the percentage of non-connected lending on GDP per capita in 2002. Res2 is plotted against Res3, which illustrates the positive effect of non-connected lending to GDP growth.